

Chapter

1

Risk Management

Risk management is our business. The U.S. Coast Guard (USCG) of the future is faced with an increasing workload and a limited ability to procure new resources and additional personnel to meet that workload. It serves a public that is sensitive to marine casualties and environmental mishaps. Achieving success in such an environment depends largely on the ability and willingness of the USCG and industry to apply new and innovative ways of doing business. This document provides an overview of the measurements and data indicative of the marine safety and security risks in the region, it outlines how Marine Safety Office Puget Sound plans to carry out its multiple legacy missions while also accommodating the increased requirements of Homeland Security, and it describes how to best reduce these risks with available resources.

Risk: an Important Factor

A risk-based approach to safety and security has been used effectively in several regulated industries, and risk is specifically required to be considered by the Ports and Waterways Safety Act (33 U.S.C. 1224). The Commandant also requires in the USCG business plan (COMDTINST M160000.2A) that all USCG commands employ risk management techniques in the execution of their respective missions.

Risk assessment and mitigation are necessary factors in developing the Area Contingency Plans, and are being pursued at the International Maritime Organization with the development of the Formal Safety Assessment process. This effort will be instrumental in the development of the Area Maritime Security Plan.

Strategic Goals

This report provides an assessment of how well the Marine Safety Office (MSO) and the Vessel Traffic Service (VTS) are meeting the Commandant's Marine Safety and Security Program strategic goals. These goals are as follows:

- **Maritime Safety** Eliminate deaths, injuries and property damage associated with commercial maritime operations.
- **Maritime Security** Protect our maritime borders from all intrusions by halting the flow of illegal drugs, aliens, and contraband into this country through maritime routes; preventing illegal fishing; and suppressing violations of federal law in the maritime region.
- **National Defense** Defend the nation as one of the five U.S. Armed Forces. Enhance regional stability in support of the National Security Strategy, utilizing our unique and relevant maritime capabilities.

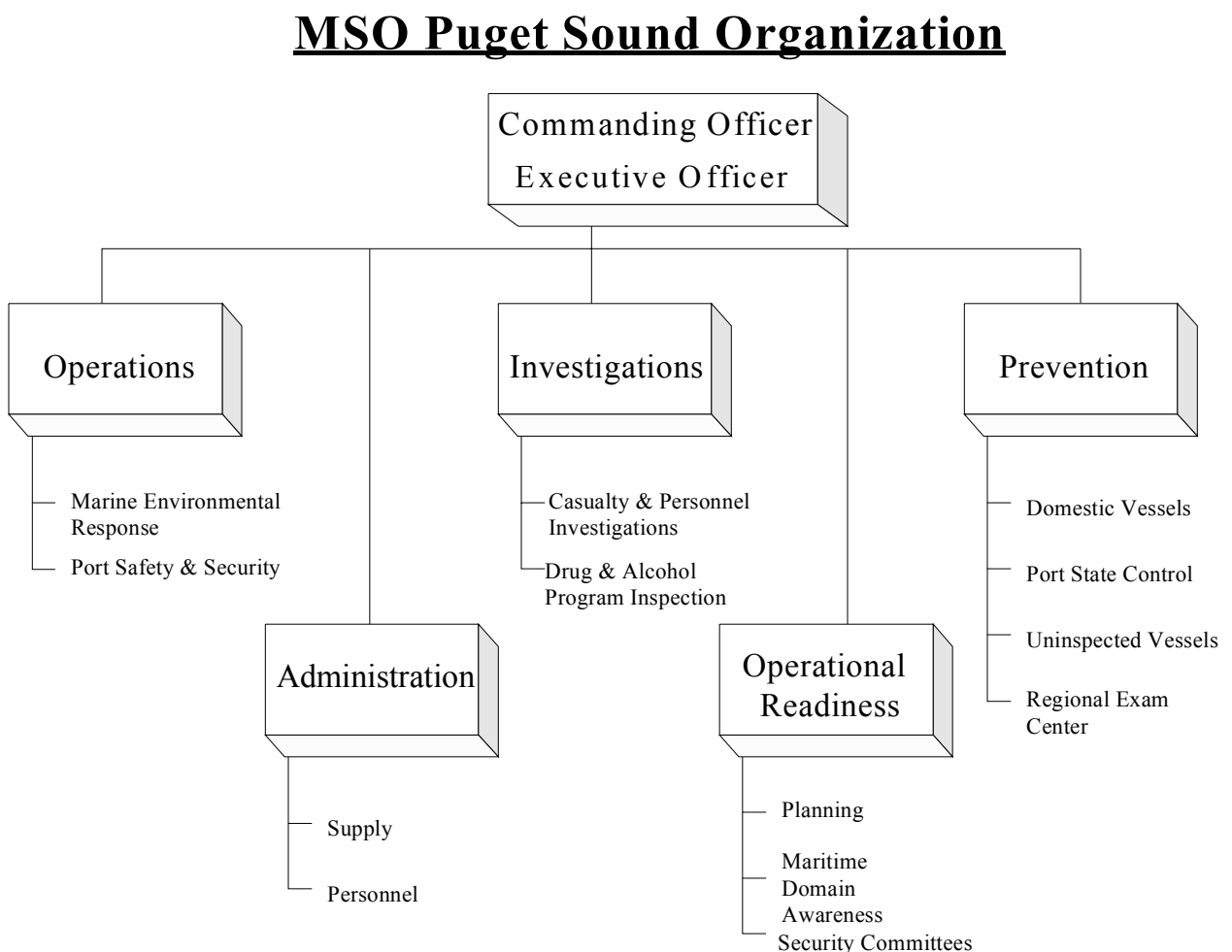
- **Protection of Natural Resources** Eliminate environmental damage and natural resource degradation associated with all maritime activities, including transportation, commercial fishing, and recreational boating.
- **Maritime Mobility** Facilitate maritime commerce and eliminate interruptions and impediments to the economical movement of goods and people, while maximizing recreational access to and enjoyment of the water.

These guiding principles serve as the basis for the organizational infrastructure and risk-based decision-making (RBDM) approach endorsed and instituted by the members of this office.

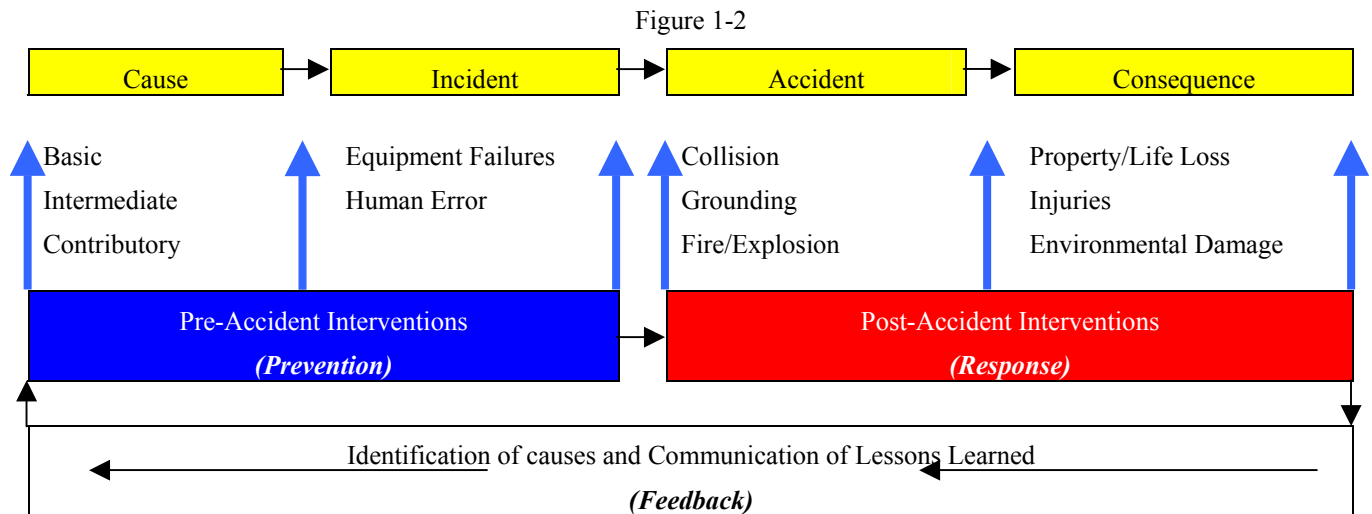
Organization

MSO Puget Sound is organized to accomplish the strategic goals outlined above. As seen in Figure 1-1, the command is organized into five departments: Prevention, Operations, Operations Readiness, Investigations, and Administration.

Figure 1-1



Within each of these departments, the functional areas of Prevention, Response and Feedback are addressed. The activities within these functional areas provide the various intervention entry points into the causal chain as seen in Figure 1-2.



Risk-Based Decision Making (RBDM)

Because of the wide scope of unit operations the use of a risk-based approach is advantageous and is used to:

- Identify and mitigate risks before an accident or security breach occurs
- Make better informed equivalent-level-of-safety and security determinations for vessel, facility, and port standards
- Identify and implement the most cost-effective risk reduction options available for any maritime safety and security issue
- Determine the most efficient use of resources through the targeting of operational controls and enforcement efforts
- Facilitate investigations by providing a structured approach to identifying root causes of mishaps

A key component of a risk-based approach to safety and security is stakeholder involvement. Practical solutions to these problems are best identified through a combination of technical analysis and practical experience. The Coast Guard can obtain and use data from various sources for a technical analysis, but depends on input from industry representatives to help interpret the data, provide additional input/data, and develop realistic risk mitigation options.

This report will outline the activities in the port, the risks that they pose and the Prevention, Response and Feedback strategies used to mitigate those risks.

Risk Management

Marine safety and security is a complex business, requiring a multi-pronged approach to address the risks inherent to maritime operations. The overall strategy within Puget Sound is more than just the sum of the individual efforts of program managers to identify the risks and appropriate mitigation strategies to reduce those risks. The combined efforts of multiple layers of identification and prevention strategies provide for a virtual “web” of risk mitigation tactics to provide a safety and security net for the Puget Sound area. Some of the components of this safety and security “net” are listed below, described in more detail in various sections of this report:

- Pre-arrival screening
- VTS Participation and tracking
- Security Boardings
- Port State Control Boardings
- Domestic Inspections
- Security Zones
- INS and Customs Boardings
- Requirement for Pilot
- Tug of Opportunity System

Sample Safety Net

Figures 1-3 and 1-4 provide an example of this approach in the many layers of prevention and mitigation in place for a ship arriving in Puget Sound.

Figure 1-3

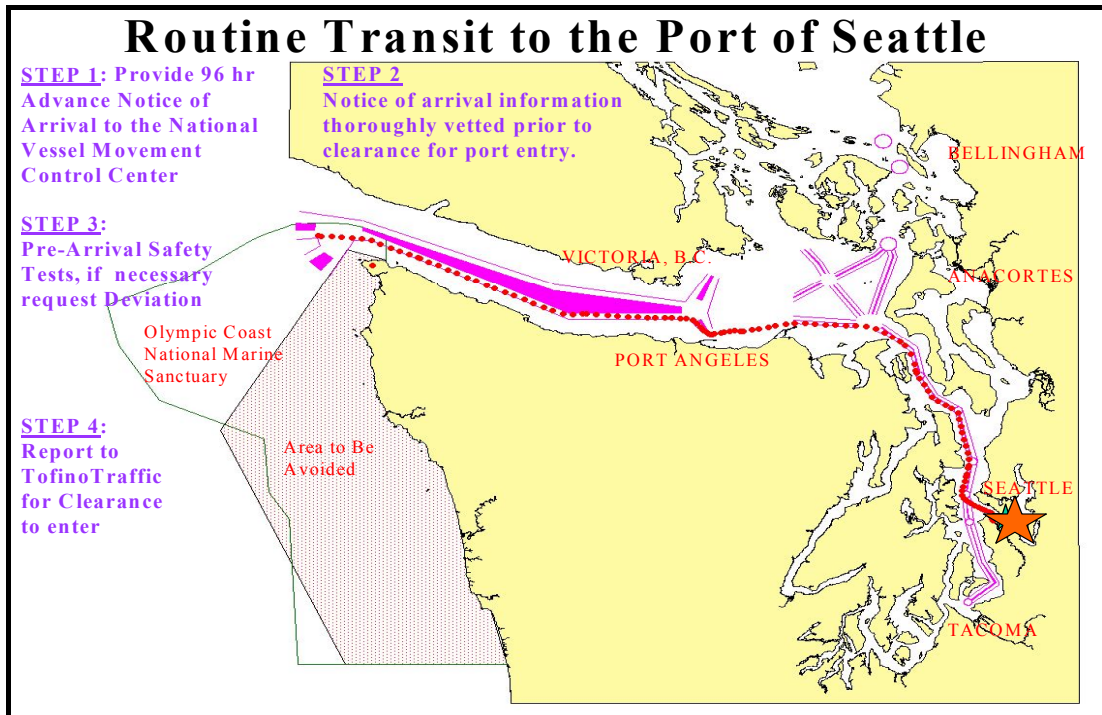
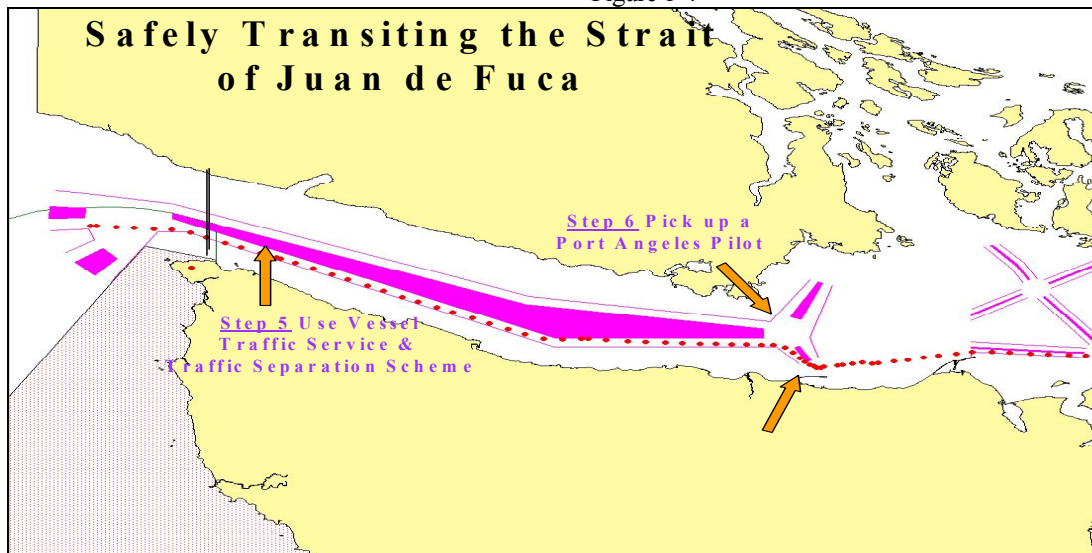


Figure 1-4



*No tankers over 125,000 deadweight tons are permitted to transit east of New Dungeness Light
Steps 1 through 5 are applicable to all vessels, foreign and domestic, transiting the Strait of Juan de Fuca.